

## **Temperature, Thermal Energy, & Heat Notes Review**

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Group: \_\_\_\_\_ Section: \_\_\_\_\_

1) What is temperature and how do thermometers measure temperature?

2) How are the three temperature scales similar? How are they different?

3) What is the relationship between thermal energy and temperature? What is the relationship between thermal energy and heat?

4) What happens to the motion of an object's particles as the object's thermal energy increases? What happens to the temperature of the object?

5) Why do some materials get hot more quickly than others?

## Performance Task: Thermometers & Temperature Conversion

Part 1: At your table, you should have two containers of different temperatures of water. Place a thermometer in each container and read the temperature in both Fahrenheit and Celsius.

Container 1:

Celsius: \_\_\_\_\_

Fahrenheit: \_\_\_\_\_

Container 2:

Celsius: \_\_\_\_\_

Fahrenheit: \_\_\_\_\_

### Part 2: Conversions

The equation for converting temperature from Celsius to Fahrenheit is  
 $(9/5 * C) + 32 = F$

The equation for converting temperature from Fahrenheit to Celsius is  
 $(F - 32) * 5/9 = C$ .

To get the Kelvin temperature, add 273.15 to the Celsius temperature

### How To Convert Temperature The Easy Way

Instead of using fractions (9/5 and 5/9) to do the conversions, you can use 1.8 to make it easier.

If you want to convert Celsius to Fahrenheit, just multiply the temperature by 1.8 and then add 32 to the product.

If you want to convert temperature from Fahrenheit to Celsius, subtract 32 from the number and then divide the difference by 1.8.

Container 1:

Celsius: \_\_\_\_\_

Fahrenheit: \_\_\_\_\_

Kelvin: \_\_\_\_\_

Container 2:

Celsius: \_\_\_\_\_

Fahrenheit: \_\_\_\_\_

Kelvin: \_\_\_\_\_